

REMARKS/ARGUMENTS

In response to the Office Action mailed November 6, 2003, the applicants respectfully request reconsideration. In the Office Action, claims 1-16 were rejected. By this amendment, the Specification, Figs. 1-4, and claims 1, 4, 6 and 11 have been amended and new claims 17-20 have been added. Accordingly, claims 1-20 are pending in this application.

Claim Rejection Under 35 U.S.C. §103

Claims 1-16 were rejected under 35 U.S.C. §103(a) as being unpatentable over Ji et al. in view of Ofek et al.

Regarding independent claim 1, the examiner states that Ji discloses at least one first communication mechanism residing on both said first and second computers for facilitating communications between said first and second processes that are each used with backup or restore operations over said network; and a second communication mechanism residing on both said first and second computers facilitating communication between said first and second processes through said data storage system. However, the examiner states that Ji does not teach means, within said first and second processes, for allowing said first and second processes to determine whether a communication from said first and second processes is from first or second communication mechanism, wherein, in response to determining if a communication is from said first communication mechanism then communicating over said network and in response to determining if a communication is from said first communication mechanism then communicating through said data storage system.

Amended independent claim 1 recites a system having first and second processes residing on first and second computers, respectively, the first and second processes being used with at least one of backup and restore operations, wherein each of said first and said second computers are in communication with both a data storage system which stores data from at least said first and second computers and a network, said system comprising:

at least one first communication mechanism residing on each of said first and

second computers for facilitating communications between said first and second processes that are each used with backup or restore operations over said network;

a second communication mechanism residing on each of said first and second computers for facilitating communication between said first and second processes through said data storage system; and

means, within said first and second processes, for allowing said first and second processes to determine whether communications from said first and second processes are from the first communication mechanism or the second communication mechanism, wherein, in response to determining that a communication is from said first communication mechanism, facilitating communication between the first process and the second process over said network, and, in response to determining that a communication is from said second communication mechanism, facilitating communication between the first process and the second process through said data storage system.

Ji teaches a system for the detection and elimination of viruses on a computer network. Each local network of the system includes a plurality of nodes 30 and a gateway node 33. As shown in Fig. 2, each gateway node 33 includes a network link 52 and a communications unit 54. The network link 52 is responsible for sending, receiving and storing signals sent over the local network in which the gateway node is included (Col. 5, lines 58-61). Communications unit 54 facilitates communication between the gateway node 33 and the other networks (Col. 5, lines 63-65). In other words, network link 52 handles communication within the local network and communications link 54 handles communication between the network and other networks. While there may be two ways for the processor 42 of the node 33 to communicate with other nodes, both are through a network connection.

Furthermore, the Ji system is not at all directed to or capable of performing data backup or restore functions. The Ji system scans every file that is communicated to the gateway node either through the network link 52 or the communications unit 54. If the file is of a type that could not include a virus, the file is transferred to its destination. If the file is of a type that can include a virus, the file is analyzed in the gateway node 33. If it doesn't include a virus, the file is transferred to its destination. If it does, it is processed in a manner determined by the user of the system. See Figs. 6A-6C.

Ji also does not include a data storage system through which first and second computers can communicate. The memory 44 of gateway node 33 includes instructions for the operation of the gateway node 33 (Col. 6, lines 8-17). There is no teaching or suggestion in Ji that first and second computers of the system communicate through a data storage system. In fact, none of the Specification and Figures indicate that it would be possible, or desirable, to carry communications through a data storage system.

Although the examiner states that Ji teaches one first communication mechanism residing on both first and second computers for facilitating communications between said first and second processes that are each used with backup or restore operations over said network; and a second communication mechanism residing on both said first and second computers facilitating communication between said first and second processes through said data storage system, it is quite clear that this is not the case.

First, Ji does not teach first and second processes that are each used with backup or restore operations. As stated above, the Ji system detects and eliminates viruses which are generally introduced to the system through email. Not only does Ji not teach or suggest using the system to perform backup and restore operations, the system is not capable of performing such operations. The examiner has not specifically shown where this is taught in the Ji patent.

Second, Ji does not teach or suggest a communication mechanism residing on each of first and second computers for facilitating communication through a data storage system. A set forth above, the only communication taught by Ji involves communication between gateway nodes of different networks and between a gateway node and a standard node of the same network. In both cases, the communication takes place over the associated network. The only memory disclosed by Ji is for the purpose of storing operating instructions for the gateway node. Although Ji shows a data storage device, no description of the operation or purpose of the device is provided in the Specification. However, there certainly is nothing in the Ji disclosure that indicates that any of the processors of the nodes are configured to communicate with each other through a data storage system. Again, the examiner has not specifically shown where this is taught in the Ji patent.

Accordingly, in addition to the features of claim 1 that the examiner admits Ji

does not teach, Ji also does not teach the features of claim 1 for which the examiner relies on Ji.

The examiner goes on to state that Ofek teaches means, within said first and second processes, for allowing said first and second processes to determine whether a communication from said first and second processes is from first or second communication mechanism, wherein, in response to determining if a communication is from said first communication mechanism then communicating over said network and in response to determining if a communication is from said first communication mechanism then communicating through said data storage system.

However, Ofek in fact teaches a data network with a remote data facility for providing redundant data storage and for enabling concurrent access to the data for multiple purposes. The system includes two data processing systems 10, 11 interconnected by a communications link 12, such as fiber optic cables or high-speed data transmission lines (col. 4, lines 34-39). The local system 10 includes a data facility and processes transactions and other priority applications. Remote system 11 includes a data facility and normally operates to mirror the data stored in the data facility of the local system 10, although in an alternative mode, it can operate independently of the local system 10. Communications link 12 is the only link between the two data processing systems. There is no first communication mechanism and second communication mechanism, and therefore, there is no determination as to whether a communication is from a first or second communication mechanism. Furthermore, there is no teaching of communication over a network as well as communication through a data storage system between the two systems. The examiner has not specifically shown where any of these features are taught in the Ofek patent.

Accordingly, Ofek also does not teach what the examiner alleges he teaches and what the examiner relies upon to support the §103 rejection.

Therefore, since Ji clearly does not teach the portions of independent claim 1 that the examiner alleges that he does and Ofek does not teach the portions of independent claim 1 that the examiner alleges that he does, the combination of Ji and Ofek certainly cannot teach all of the features of the invention recited in independent claim 1.

Additionally, since neither reference teaches or suggests any of the features

recited in independent claim 1, there certainly is no motivation to combine the references.

Based on the foregoing, the applicants assert that independent claim 1 is allowable over the combination of Ji and Ofek and the at the rejection of independent claim 1 under 35 U.S.C. §103(a) should be withdrawn.

Claims 2-5 depend from independent claim 1 and are allowable for at least the same reasons as independent claim 1.

Regarding independent claim 6, the examiner states that Ji teaches establishing at least one first connection over a network, between first and second processes that are each used with backup or restore operations and that are each residing on different computers, wherein said first connection is configured to be responsively used for communication over a network. The examiner further includes language in the rejection of independent claim 6 that is not part of independent claim 6, and as such, will not be addressed. The examiner states that Ji does not teach establishing, in parallel with establishing said at least one first connection, a second connection, through a data storage system, between said first and said second processes, wherein said second connection is configured to be responsively used for communication over said data storage system. However, the examiner states that Ofek teaches establishing, in parallel with establishing said at least one first connection, a second connection, through a data storage system, between said first and said second processes, wherein said second connection is configured to be responsively used for communication over said data storage system. Based on this, the examiner draws the conclusion that it would have been obvious to combine Ji and Ofek to come up with the invention recited in independent claim 6. This rejection is traversed, since, as set forth above, the references do not teach or suggest the claimed invention, alone or in combination, and because there is no motivation to combine the references.

Amended independent claim 6 recites a method for assisting with backup and restore operations in a computer system, the method comprising:

(a) establishing at least one first connection over a network, between first and second processes that are each used with at least one of backup and restore operations and that are each residing on different computers, wherein said first connection is configured to be responsively used for communication over a network; and

(b) establishing, in parallel with establishing said at least one first connection, a second connection, through a data storage system, between said first and said second processes, wherein said second connection is configured to be responsively used for communication over said data storage system.

First, Ji does not teach first and second processes that are each used with backup or restore operations. As set forth above, The Ji system is for the purpose of detecting and eliminating viruses on messages sent between and within networks. There is no teaching or suggestion in Ji that the system be used for backup and restore operations. In fact, because the Ji system is specifically directed to intercepting, analyzing and passing on messages in a network, the disclosure of Ji actually teaches against backing up data, since it is the purpose of the system to pass safe messages through the system and to eliminate unsafe messages. There is no need for saving the messages for longer than the time needed to analyze them, and certainly no need for backing up or restoring the messages.

Second, Ofek does not teach establishing, in parallel with establishing at least one first connection, a second connection, through a data storage system, between first and second processes, wherein the second connection is configured to be responsively used for communication over a data storage system. As set forth above, Ofek teaches one connection between the local system 10 and the remote system 11. There is no second connection, and especially no second connection through a data storage system.

Furthermore, even if the references taught what the examiner alleges that they teach, which applicants assert that they do not, there is no motivation to combine the references. As set forth above, the Ji system has nothing to do with the backup and restoration of data. In fact, Ji teaches against saving any of the messages that are passed through the system for any longer than is necessary to perform the detection process. Therefore, there would be no motivation to look to Ofek for the purpose of modifying the Ji system to include any of the teachings of Ofek.

Moreover, even if the references were combined, the combination would not teach the invention recited in independent claim 6. Since Ji clearly does not teach the portions of independent claim 6 that the examiner alleges that he does and Ofek does not teach the portions of independent claim 6 that the examiner alleges that he does, the

combination of Ji and Ofek certainly cannot teach all of the features of the invention recited in independent claim 6.

Based on the foregoing, the applicants assert that independent claim 6 is allowable over the combination of Ji and Ofek and the at the rejection of independent claim 6 under 35 U.S.C. §103(a) should be withdrawn.

Claims 7-14 depend from independent claim 6 and are allowable for at least the same reasons as independent claim 6.

Regarding independent claim 15, the examiner only states that Ji teaches identifying resources on a data storage device to be used in order to transfer information through said data storage device, and that the claim is rejected based on the same rationale applied to claims 6 and 13. This rejection is respectfully traversed, since, as set forth above, the references do not teach or suggest the claimed invention, alone or in combination, and because there is no motivation to combine the references.

Independent claim 15 recites a method for assisting with backup and restore operations in a computer system, the method comprising:

establishing a connection, over a network, between a first process and a second process that are each used with backup or restore operations and that are each residing on different computers;

receiving information about a dynamically created communication mechanism over the established connection;

establishing a second connection over the network, on the dynamically created communication mechanism, between said first and second processes;

identifying resources on a data storage system to be used in order to transfer information through said data storage system; and

establishing a connection between said first and second processes through said data storage system.

Since independent claim 15 is different from independent claim 6, the applicants are not quite sure how the examiner would have specifically applied the references to independent claim 15. However, even if the references taught what the examiner alleges that they teach, which the applicants assert that they do not; there is no motivation to combine the references. As set forth above, the Ji system has nothing to do with the

backup and restoration of data. In fact, Ji teaches against saving any of the messages that are passed through the system for any longer than is necessary to perform the detection process. Therefore, there would be no motivation to look to Ofek for the purpose of modifying the Ji system to include any of the teachings of Ofek.

Moreover, even if the references were combined, the combination would not teach the invention recited in independent claim 15. Since Ji clearly does not teach the portions of independent claim 15 that it would seem the examiner alleges that he does and Ofek does not teach the portions of independent claim 15 that it would seem the examiner alleges that he does, the combination of Ji and Ofek certainly cannot teach all of the features of the invention recited in independent claim 15.

Based on the foregoing, the applicants assert that independent claim 15 is allowable over the combination of Ji and Ofek and that the rejection of independent claim 15 under 35 U.S.C. §103(a) should be withdrawn.

Claim 16 depends from independent claim 15 and is allowable for at least the same reasons as independent claim 15.

New claims 17-20 have been added to the application to further claim applicants' contribution to the art. Based on the arguments set forth above regarding art applied to claims 1-16, the applicants believe that new claims 17-20 are allowable over the cited references.

Based on the foregoing amendments and remarks, the applicants assert that pending claims 1-20 are allowable over the prior art of record and respectfully requests that a timely Notice of Allowance be issued in this application.

In the event the Examiner deems personal contact desirable in the disposition of this case, the Examiner is invited to call the undersigned attorney at 508.293.7835.

Please charge any fees occasioned by this submission to Deposit Account No. 05-0889.

Respectfully submitted,

2/2/04

Date

Scott A Ouellette
Scott A. Ouellette, Esq.
Reg. No. 38,573
EMC Corporation
176 South Street
Hopkinton, MA 01748
Telephone: (508) 293-7835
Facsimile: (508) 497-6915

APPENDIX

Replacement Sheet

1/7

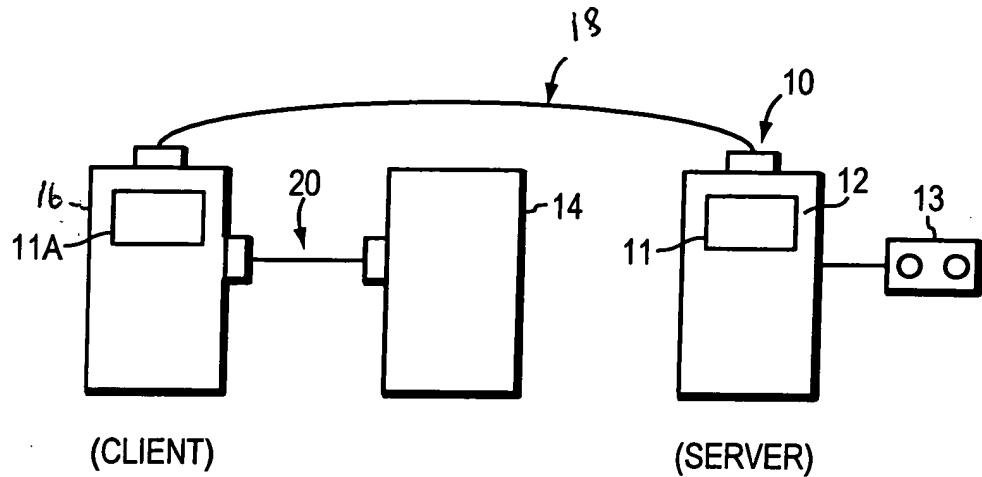


FIG. 1

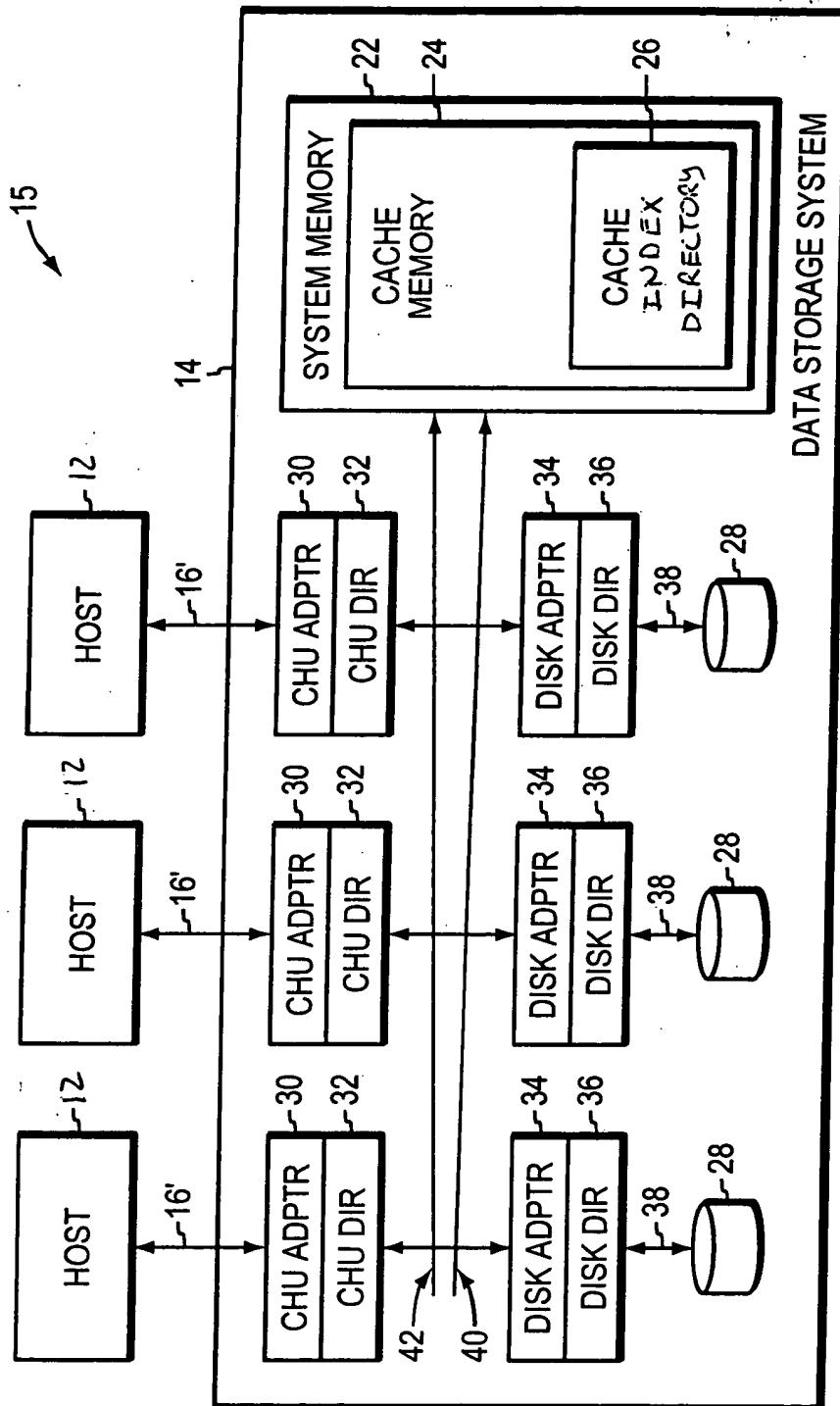
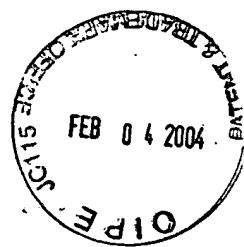


FIG. 2

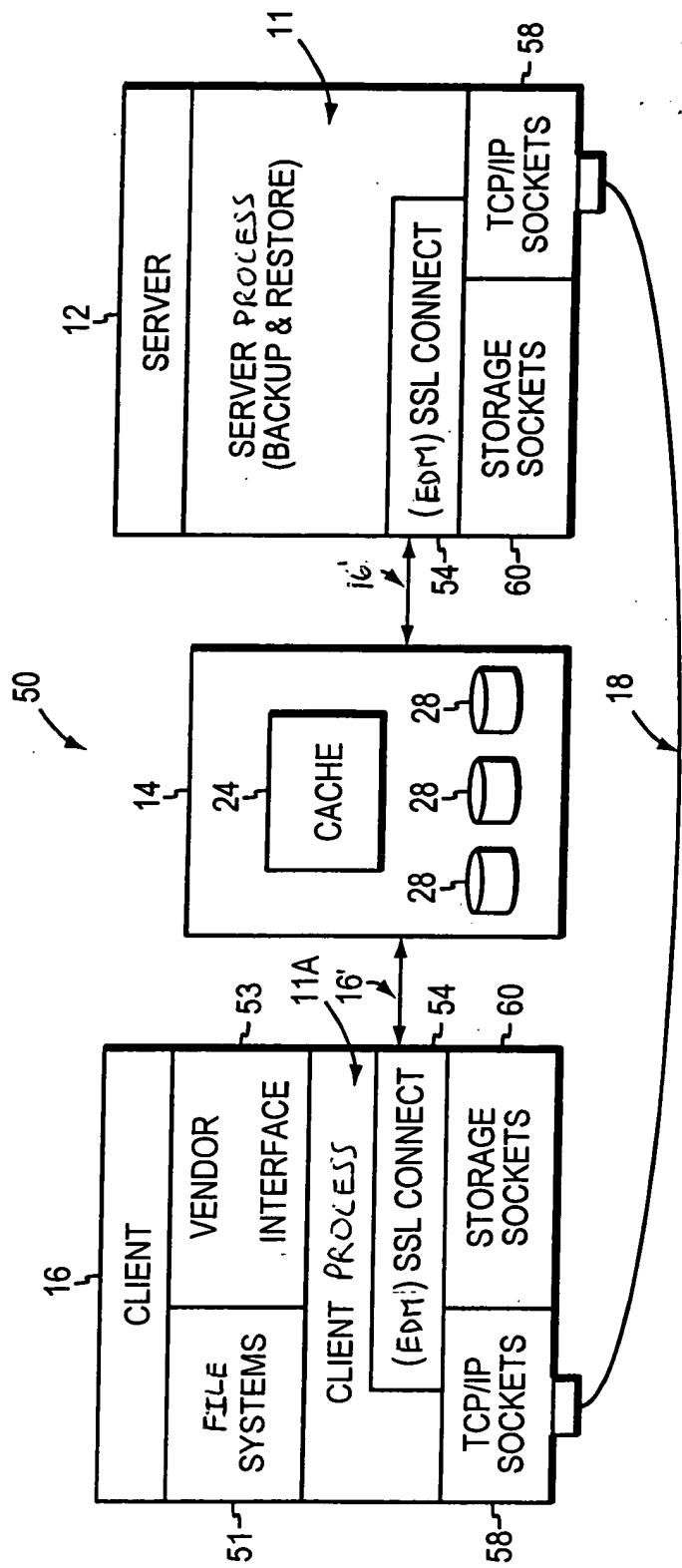


FIG. 3

FEB 04 2004



4/7

NT FILE SYSTEM (SERVER INITIATES)

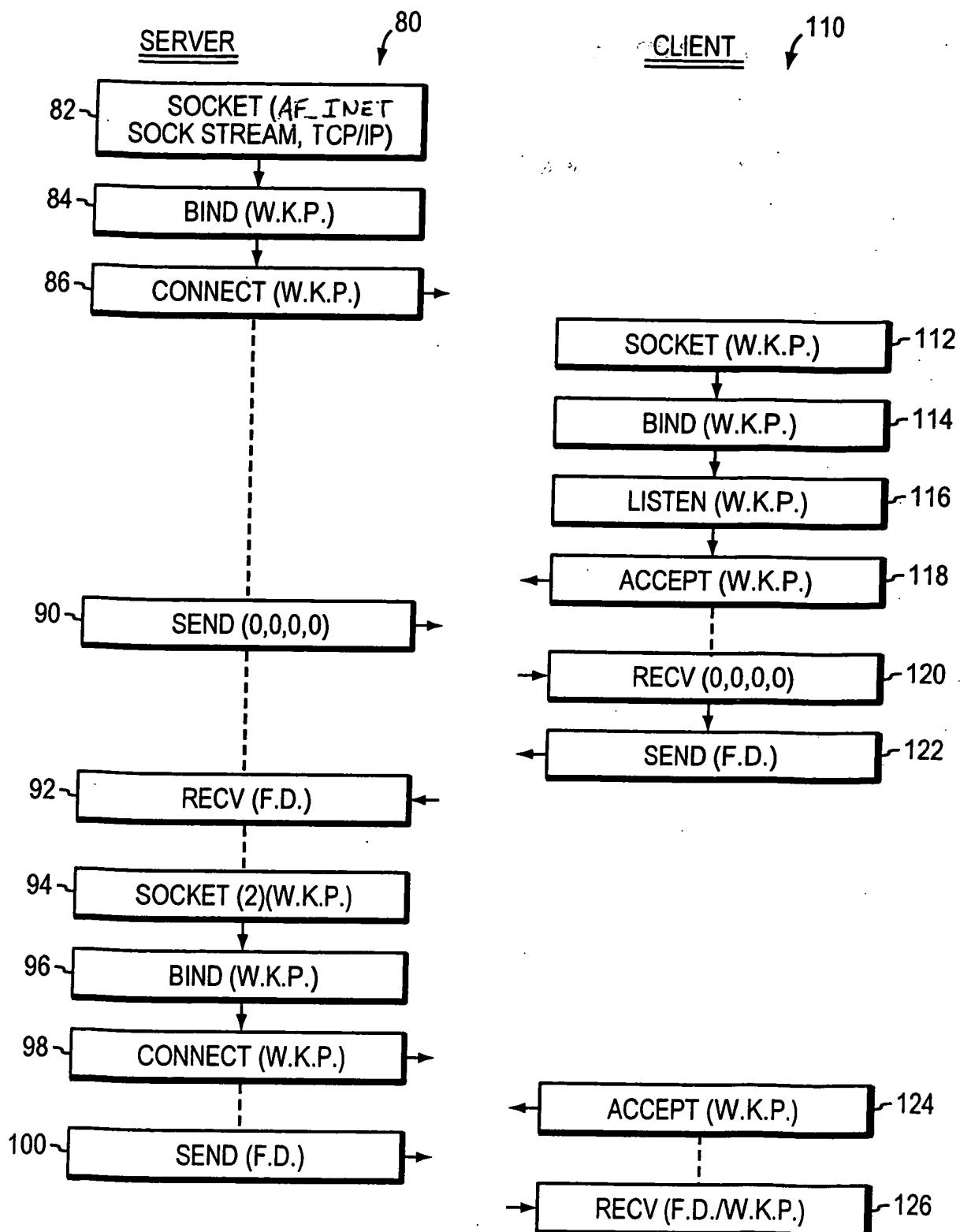


FIG. 4